

KANSAS CITY, MISSOURI EMERGENCY OPERATIONS PLAN

Annex I: Infrastructure Operations

September 2014

KANSAS CITY, MISSOURI INFRASTRUCTURE OPERATIONS PLAN

Primary (lead) Departments:	Parks & Recreation Public Works Water Services
Secondary (support) Departments:	Capital Improvements Management Office Information Technology Department Other City Departments as Required
Secondary (support) External Agencies:	Kansas City Power & Light Missouri Gas Energy Mutual Aid Other Private Utilities Plan Bulldozer Members

I. PURPOSE STATEMENT

The purpose of this Annex is to provide guidance to both City infrastructure departments and private utility companies when responding to major emergencies and disasters. For the purposes of this plan, the term “infrastructure” means physical systems that are necessary for the effective and efficient operation of government, commerce and industry, and to maintain the health, safety and welfare of the public, including:

- Roads, bridges and traffic control systems
- Water and sewer systems, including drinking water production and distribution, collection and treatment of wastewater, sewers and storm water drainage
- Utilities, such as electric, gas, telephone communications, and public safety communications systems
- Solid waste collection and disposal
- Critical public buildings

For electronic and computer infrastructure, refer to the General Services Department Information and Technology Division’s **Continuity of Operations, Disaster Recovery, and Cyber Terrorism Plan.**

Radio and communication’s infrastructure is covered in **Annex B – Emergency Communications Plan.**

II. PLANNING ASSUMPTIONS

- A. The Public Works, Water Services and Parks and Recreation departments are responsible for the provision and maintenance of municipal infrastructure systems. In a major emergency or disaster, these departments will restore infrastructure on a priority basis, and may require supplemental personnel, equipment and other resources to adequately respond.
- B. Some vital systems, particularly electric, gas and telephone communications are provided by private utilities. These utilities maintain cooperative agreements with other utility providers to supplement personnel and equipment when needed. The City of Kansas City may also render such support to private utilities as is available, appropriate, and requested.
- C. All emergency Infrastructure operations will be conducted in accordance with this plan and will be managed in a manner that conforms to the National Incident Management System (NIMS).

III. LEGAL AUTHORITIES

- A. Charter of Kansas City, Missouri (Adopted August 8, 2006)
 - 1. Article IV, Section 412 – Parks and Recreation
 - 2. Article IV, Section 413 – Public Works
 - 3. Article IV, Section 414 – Water Services
 - 4. Article X, Parks and Recreation
- B. Kansas City, Missouri Code of Ordinances, Sections:
 - 1. 70-38 – Authority to make emergency and temporary regulations
 - 2. 50-192 – Unlawful entry into area designated as disaster area
- C. Administrative Regulation (AR)
 - 1. 1-07 Floodplain Management
 - 2. 1-12 City Standard Erosion and Sediment Control Specification
 - 3. 1-17 Reasonable Accommodations for Persons with Disabilities
 - 4. 3-10 Building, Repair, Maintenance or Modification
- D. Other
 - Supplement No. 1 to APWA Standard Specifications and Design Criteria Section 5600 – Storm Drainage Systems (as adopted by City Council Resolution # CS070031, dated July 18, 2006).

IV. ORGANIZATION AND RESPONSIBILITIES

- A. Departmental Responsibilities
 - 1. Parks and Recreation Department

The department currently oversees more than 221 parks, 138 miles boulevards and parkways, 49 ornamental fountains, 152 ball diamonds, 10

community centers, 105 tennis courts, 5 golf courses, 5 museums and attractions, 30 pools, 61 picnic shelters, dozens of outdoor events, and more than 400 recreational and educational programs. The main office is located at 4600 East 63rd Street. The Department Director heads the organization and oversees six divisions. Each division is supervised by a Division Manager. The divisions include:

a. Director's Office

This division is responsible for general administration of the department, including budgeting, accounting and finance, marketing, public information, correspondence and human resources.

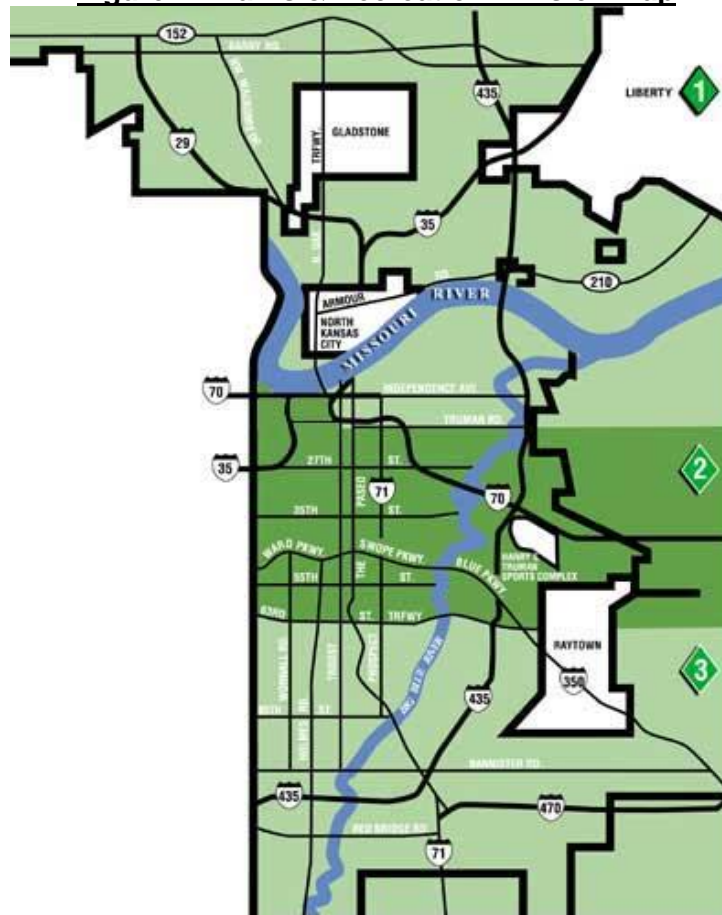
b. Citywide Services

This division oversees the management of the City's trees in the right-of-ways located along streets and boulevards. The services they provide consist of storm response, tree pruning, tree planting, tree removal, cooperative progress with utilities, landscaping, and greenhouse operations.

c. Planning and Design Services

This Division provides responsive, professional planning, design, construction, conservation, and renovation services. They provide master plans or construction development plans and specifications for property under the control of the Board of Parks and Recreation commissioners. Typical work includes planning for parks, playgrounds, plazas, boulevards, lakes, trails and consultation services to other City departments. The division also generates conceptual plans for the extension of the boulevard and parkway system and is responsible for the preservation, restoration and additions to the City's outdoor monuments and fountains.

Figure 1 - Parks & Recreation Division Map



d. Central, North, and South Regional Divisions

The Parks and Recreation Department has divided the City into three geographic areas (see [Figure 1 - Parks & Recreation Division Map](#)). Each geographic division is responsible for the community centers, parks and boulevard maintenance, and recreation programs in their area. The Central Division covers approximately the area of the City from Truman Road to 63rd Street. The North Division covers approximately the area from Truman Road to the city limits on the north end of the jurisdiction. The South Division covers an approximate area from 63rd Street to the city limits on the south end of the jurisdiction.

2. Public Works Department (PWD)

PWD provides many essential city services, including trash collection, street maintenance, traffic signs and signals, street lighting and snow removal. Additional responsibilities include oversight of public transportation (Area Transportation Authority). The Department Director heads up the

organizations and oversees five divisions. Each division is supervised by a Division Manager. These divisions include:

a. Administration

This division is responsible for general administration of the department, including budgeting, accounting and finance, public information, correspondence and human resources.

b. Parking Services

The primary objective of this division is to consolidate key elements of the City's parking management functions to more effectively and efficiently track, implement, plan and manage the parking resources in the City. This division is located on the 23rd floor of City Hall.

c. Solid Waste

This division oversees solid waste management for the City. The DSWM is responsible for public and residential trash pick-up, bulky item removal, recycling and yard waste pick-up and drop-off sites. The division also deals with illegal dumping sites and dead animal collection. Under solid waste operations, the City is divided up into three zones for weekly trash pick-up and 15 zones for bulky item pick-up. The division is located at 5300 Municipal Ave.

d. Street and Traffic Operations

This is the largest division in Public Works. It is located on the 19th floor of City Hall and at six other locations around the city. The division is responsible for providing several programs to the residents. These programs include:

- Street Maintenance Program – This program entails responsibility for patching potholes, minor bridge repair, cleaning roadside ditches and snow and ice removal. This also includes the 24-hour snow command post which coordinates citywide snow and ice control operations and disseminates weather-related information.
- Street Maintenance Construction Program – This program is responsible for the street preservation program, sidewalk construction, materials testing and lab, and City surveying services.
- The Traffic Engineering and Operations – This group maintains the City's system of traffic signals and signs, striping, and street lighting. This also includes traffic studies for speed limit changes, stop signs, signal requests and traffic calming.
- The Planning Section – This section develops a long term plan of capital improvements and technical review of design plan for the PWD.

3. Water Services Department (WSD)

The Water Services Department maintains and operates 2800 miles of water main lines, 2200 miles of sanitary waste water lines, 600 miles of combined storm water and sewer lines, 39 water stations, 15 water pumping stations, 15 flood stations, 6 waste water facilities, 1 drinking water treatment plant, and 15 water pumping stations with 150 million gallons of water storage. WSD is responsible for water collection, processing and distribution systems,

and storm water management and control systems and waste water collection among other duties. WSD has 168,000 retail customers and 33 wholesale customers. The main WSD office is located at 4800 East 63rd Street. The Department Director heads up the organizations and oversees five divisions. Each division is supervised by a Division Manager. The Water Services Department consists of the following divisions:

a. Director's Office

This office oversees the metropolitan area water, sewer and storm water services, and establishes department policies. It enforces City rules and regulations and provides guidance to all divisions within the department.

b. Engineering Services

This division provides engineering services for projects related to water distribution and wastewater collection, computer-aided design (CAD), and geographic information systems (GIS) support for all department engineering activities.

In addition, this division is responsible for administering all contracts executed by the department. This work includes administering all construction, design professional, service or maintenance and professional technical services contracts. In addition to the contract work, all legislation sponsored by the department or affecting its employees or operations is prepared, monitored and available on file. The Contracts Office is involved in contracting funding matters and administers all grants, loans and innovative financing acquired by the department. It also acts as the contract liaison on all citywide contracting matters.

c. Communications

This division markets water and wastewater services, manages communication projects, and has its own public information officer for media relations.

d. Facilities and Plant Engineering

This division provides engineering services for projects related to water and wastewater facilities, plants, and manages construction inspection and survey services for all department projects.

e. Human Resources

This division administers various payroll, employee screening, classification, management, planning and training functions for the department. During an emergency Human Resources provides guidance for emergency staffing and extending shifts.

f. Information Technology

This division provides technical support for systems users and IT-related projects.

g. Laboratory Services

This division tests water and monitors quality throughout the cycle.

h. Meter Field Services

This division is responsible for water turn-on and shut-off, meter reading, inspections for leaks, issuance of permits, installation of water lines and staffing dispatch.

i. Pipeline

This division is responsible for inspection and repair of water main breaks, and water shut-offs.

j. Safety and Security Division

This division works to ensure that department employees utilize safe work practices, that work environment hazards are minimized, and provides security and awareness for the department. The division also provides security for all Water facilities utilizing physical and electronic systems.

k. Stormwater Maintenance

This division provides cleaning and repair service for the storm water collection system and street sweeping services.

l. Wastewater Maintenance

This division maintains the waste water distribution system.

m. Wastewater/Industrial Waste Treatment

This division is responsible for the operation and maintenance of all wastewater and storm water facilities and the disposal or recycling of yard waste.

n. Water Supply

This division produces and delivers potable water to customers and ensures water supplies to fire hydrants.

V. CONCEPT OF OPERATIONS

A. General

1. When a major emergency or disaster occurs, the infrastructure departments will send a representative to the EOC if activated and will coordinate all operations and recovery activities under the general direction of the EMD (or when activated the UCT).
2. Damage to City infrastructure will be assessed to help officials determine and establish priorities for restoration of affected infrastructure. Damage assessment operations will be conducted in accordance with **Annex D - Damage Assessment**.
3. The repair and restoration of damaged infrastructure will be prioritized as follows:
 - a. That which protects the life, health and safety of the greatest number of people.
 - b. That which preserves public infrastructure that is necessary for the continuation of emergency services.

- c. That which preserves public and private property in a manner that supports economic activity and the general well being of the public.
- d. That which protects the environment and historic assets.

B. Streets and Traffic Systems

1. Public Works Department is responsible for the following operations on City streets and bridges:
 - a. Snow removal and ice treatment (with assistance from Parks and Recreation Dept. and WSD).
 - b. Clearing and removing debris.
 - c. Conducting damage assessment and inspections.
 - d. Repair and restoration.
 - e. Assisting with traffic control, including adjustment of traffic signals, placement of signs and barricades, providing flagmen, and developing detour routes.
 - f. Assisting stranded motorists during major evacuation operations.
2. The interstate and federal highway systems are maintained by the Missouri Department of Transportation (MoDOT). These functions include:
 - a. Snow removal and ice treatment.
 - b. Clearing and removing debris.
 - c. Conducting damage assessment and inspections.
 - d. Coordinating repair of the interstate and highway system.
 - e. Repair and restoration.
 - f. Assisting with traffic control, KC Scout display information, placement of signs and barricades, and developing detour routes.
 - g. Assisting stranded motorists during major evacuation operations.

C. Public Buildings

1. Public buildings consist of government buildings/facilities, community centers and schools. Functions related to public building infrastructure include:
 - a. Conducting damage assessment and inspections.
 - b. Coordinating repairs to City buildings and facilities.
 - c. Providing architectural and engineering services for damage assessment and repair.
 - d. Coordinate emergency utility service to critical functions.
 - e. Coordinate restoration of normal utility service.
2. Immediate restoration of buildings that have suffered major damage is generally infeasible. Major repairs will normally have to be postponed until recovery operations commence. Such repairs may be contracted.

D. Water System

1. The Kansas City water system is an essential and complex component to the City infrastructure. The Water Services Department is responsible for the water system and supply in the City infrastructure as well as to other jurisdictions in the Metro area. The water system consists of drinking water production and distribution, collection and treatment of wastewater, maintenance of sewers and storm water drainage. Functions related to the water system infrastructure include:
 - a. Conducting damage assessment and inspection of water facilities, equipment, sewers and the storm water drainage system.
 - WSD maintains a crew within the department to conduct damage assessment (see also **Annex D – Damage Assessment**)
 - WSD will test water for contaminants utilizing its certified lab.
 - b. Coordinating repairs to all water facilities, equipment and systems.
 - If needed, WSD can increase its workforce through supplemental workforce contracts, Mutual Aid with four other jurisdictions (**see 4 below**), or the MARC Bulldozer (a resource guide from the Mid America Regional Council)
 - c. Emergency shut off of water
 - Water can be shut off at the facilities via remote or on site.
 - In the field, water can only be shut off on site. Meter Field Services, Pipeline Services, and Water Supply Services have the capability.
 - d. Restoration of drinking water and waste water operations as soon as possible.
 - Per operating procedures, hospitals, dialysis centers, nursing homes, and other medical facilities will have priority restoration.
 - e. Flood monitoring.
 - f. Clearing culverts and storm drains.
2. The WSD conducts emergency operations at its water facilities as dictated under their **One Plan**. Guidelines on Flood Operations are found in the **Levee Flood Action Plans for City Levees** and the **Flood Barricade Strike Team Guide**.
3. WSD, through the Household Hazardous Waste Program, oversees hazardous waste compliance for the City. WSD makes sure that City personnel as well as residents collect, handle and dispose of hazardous waste correctly. WSD may provide a liaison to the EOC to help coordinate hazardous waste issues.
4. If needed, WSD has 4 emergency interconnections to obtain water from WaterOne, Kansas City Board of Public Utilities (BPU), Independence, MO and Gladstone, MO. WSD retains reciprocal agreements with these agencies to supply emergency water as well.

- a. The WSD Emergency Operations Plan describes in detail the process for notifying the 4 agencies above that KCMO water will be shut off and water will be shunted from them respectively.
5. WSD Safety and Security Division provides safety and protection measures as outlined in two documents: **WSD Safety Plan** (covering safety practices for employees) and the **WSD Security Plan** (providing procedures for protection of the water supply and facilities).

E. Utility Services

1. Utilities are a critical component of the City's infrastructure. Utilities include gas, electric and telephone services. These utilities are necessary for efficient day to day operations of the City and to the welfare of the public. Each utility provider will operate in accordance with its own emergency restoration plan.
2. Internet, telephonic and computer systems for the City will be maintained and restored as soon as possible by the City Information Technology Division of General Services.
3. If needed, the EMD may request a utility company to provide a liaison to the EOC as part of the infrastructure team.

F. Solid Waste System

1. The Division of Solid Waste Management (DSWM) under the PW Department oversees Solid Waste Management for the City. The DSWM is responsible for public and residential trash pick-up, bulky item removal, recycling and yard waste pick-up and drop-off sites. The division also deals with illegal dumping sites and dead animal collection. Under DSWM operations, the City is divided up into three zones for weekly trash pick-up and 15 zones for bulky item pick-up.
2. Depending on the type of incident, disasters can create major debris or delay the solid waste collection and disposal process. This causes trash build up to exceed normal conditions. The DSWM will conduct a waste assessment after a disaster and recommend to the PW Director and City Manager the actions that should be taken to deal with the excess waste. If necessary, the PW Director can initiate an emergency clause in solid waste contracts to help expedite the collection and disposal of excess solid waste.
3. The Office of Environmental Quality (OEQ) may also play a role in Solid Waste operations. OEQ makes sure all City government actions are performed in an environmentally responsible manner; promotes City policies that encourage the private sector to preserve and enhance the environment; and collaborates with public and private partners on projects that preserve and enhance the environment. OEQ also deals with inspections of buildings containing asbestos, contaminated soils, and works with the Fire Department on post clean up activities related to hazardous waste. Guidelines on environmental management are found in the **Environmental Management System Manual**, maintained by OEQ.
4. If requested by the EMD/UCT, the OEQ may provide a liaison to the EOC to help coordinate environmental compliance during infrastructure operations.

G. Barricade Operations

Barricades are frequently needed on City streets, bridges and low water crossings during flash flood conditions to prevent the public from driving into danger. The Parks and Recreation, Public Works and Water Services departments share responsibility for barricading operations. Details on barricade operations can be found in the **Flood Barricade Strike Team Guide** and **HSRP 1 – Flood Operations** for more information.

1. Areas of Responsibility (Division Boundaries)

See **Figure 2 - Barricade Responsibilities** for a boundary map.

a. Division A – Public Works Department

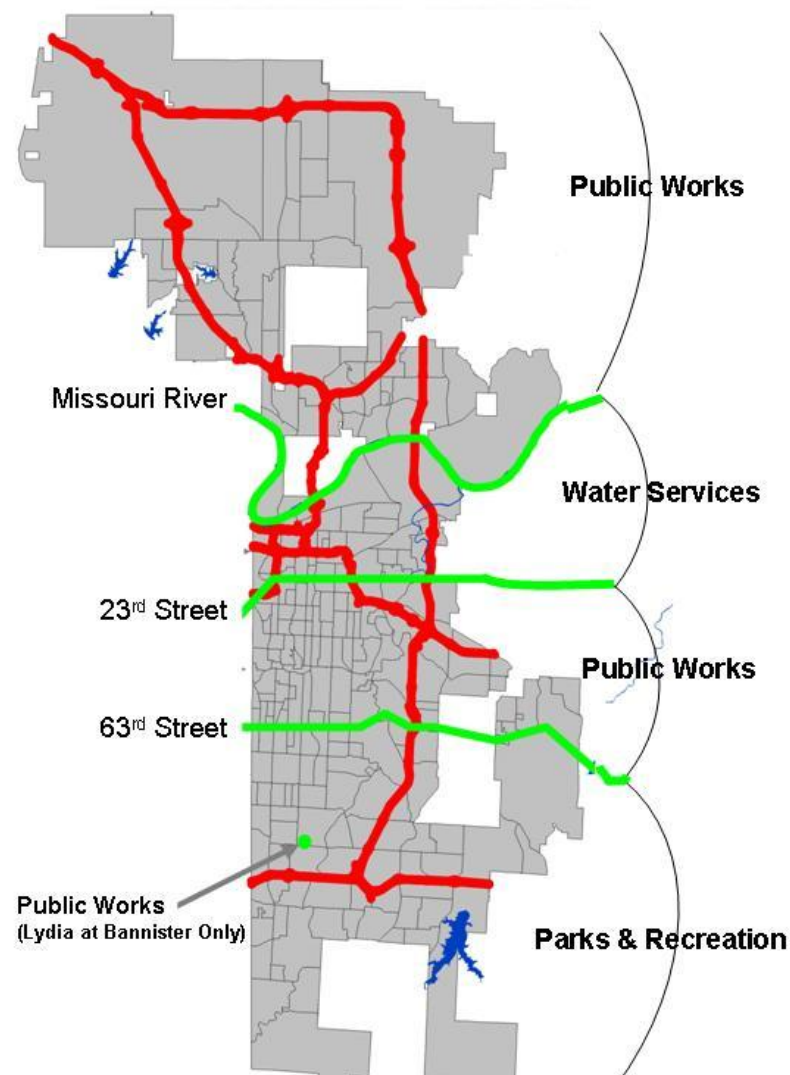
- North of the Missouri River
- South of 23rd Street to (and including) 63rd Street

b. Division B – Water Services

- South of the Missouri River to (and including) 23rd Street
- Southwest Boulevard and the area between to the Kansas State Line

c. Division C – Parks and Recreation D

- South of 63rd Street

Figure 2 - Barricade Responsibilities**City Barricade Responsibilities
by Department****2. Activation****a. Level 0**

- The EOC is not activated as impact is anticipated to be mild.
- Flood Barricade Division Supervisors will monitor conditions in their divisions and deploy barricade strike teams as needed.

b. Level 1

- The EOC is activated to level 1 to monitor a potential incident. EOC staff will relay information provided by the NWS to City Departments as needed.
- Flood Barricade Division Supervisors will monitor conditions in their divisions and deploy barricade strike teams as needed.

c. Level 2

- The EOC is activated to prepare for or respond to an actual incident. The impact is anticipated to be moderate.
- The Emergency Management Director or designee will request affected department representatives to deploy to the EOC
- Flood Barricade Division Supervisors will monitor conditions in their divisions and deploy barricade strike teams as needed.

d. Level 3

- The EOC is activated to prepare for or respond to an actual incident. The impact is anticipated to be moderate.
- If not yet done so, the Emergency Management Director or designee will request affected department representatives to deploy to the EOC.
- The EMD or designee will request the UMT to activate.
- Flood Barricade Division Supervisors will monitor conditions in their divisions and deploy barricade strike teams as needed.

2. Centralized Dispatching – Water Services Dispatch

Water Services Dispatch is the centralized point of contact for dispatching and tracking flood barricades. Citizen reports of flooding should be forwarded to Water Dispatch. Water Services will record flood calls in WebEOC.

3. Barricade Placement

Barricades will be placed in a manner that will prohibit motorists from driving through dangerous flood waters positioned to provide a turn around point for vehicles. Barricades will remain in place until flood waters have receded and the road has been inspected for damage that could endanger motorists. Barricade locations should be reported to Water Dispatch, tracked on departmental work order forms, and entered into WebEOC.

Division Supervisors and strike teams may place barricades at observed areas of flooding and report those placements to Water Dispatch. Emergency Responders identifying a need for barricades will contact the Water Services Dispatch that they are placing the barricade.

Certain areas prone to frequent flooding may have pre-staged barricades. The locations are listed in the **Flood Barricade Strike Team Guide**.